

Product Discontinuation Notices

March 1, 2011

Photoelectric Sensors

No. 2011E011

Discontinuation Notice of built-in Power Supply Photoelectric sensors E3B2 series

Product Discontinuation

Recommended Replacement



E3B2-D2 series
E3B2-R5/R7 series



E3G-ML79 series
E3G-MR19 series

Discontinuation date : The end of March, 2013

Caution on recommended replacement

- 1) Please pay attention on wiring because the wiring No. is different.
- 2) Sensitivity adjustment method of Distance setting type will be changed from volume to teaching.
- 3) Mounting dimensions and shapes are changed. Details please refer to the dimension drawing.

Difference from discontinued product

Model	Body Color	Dimensions	Wire connection	Mounting Dimensions	Characteristics	Operation ratings	Operation methods
E3G-ML79 series	--	--	--	--	*	*	-
E3G-MR19 series	--	--	--	--	*	*	*

** : Fully compatible

* : The change is a little/Almost compatible

-- : Not compatible

- : No corresponding specification

Product Discontinuation and recommended replacement

Product discontinuation	Recommended replacement
E3B2-D2M4-US	E3G-ML79-US
E3B2-D2M4-US-N	E3G-ML79-US
E3B2-D2M4D-US	E3G-ML79T-US
E3B2-D2M4D-US-N-3	E3G-ML79T-US
E3B2-D2M4D-US-3	E3G-ML79T-US
E3B2-R5M4-US	E3G-MR19-US
E3B2-R5M4D-US	E3G-MR19T-US
E3B2-R5M4D-US-3	E3G-MR19T-US
E3B2-R7M4-US	E3G-MR19-US
E3B2-R7M4D-US	E3G-MR19T-US
E3B2-D2M4-G	E3G-ML79-G
E3B2-D2M4-GN	E3G-ML79-G
E3B2-D2M4D-G	E3G-ML79T-G
E3B2-R5M4-G	E3G-MR19-G
E3B2-R5M4D-G	E3G-MR19T-G
E3B2-R7M4-G	E3G-MR19-G
E3B2-R7M4D-G	E3G-MR19T-G

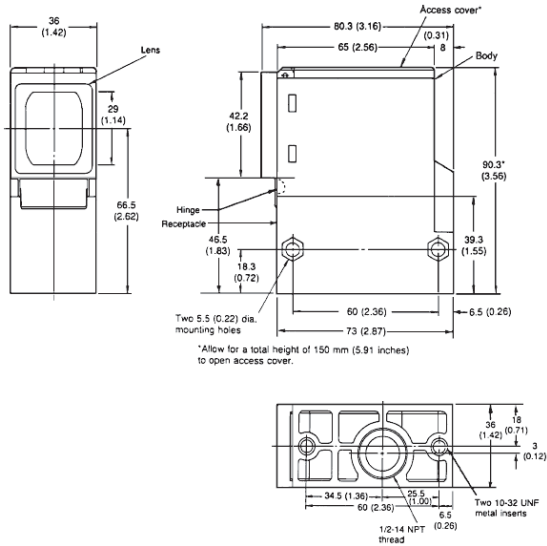
Body color

Product discontinuation	Recommendable replacement
Yellow + Black	Black

Dimensions

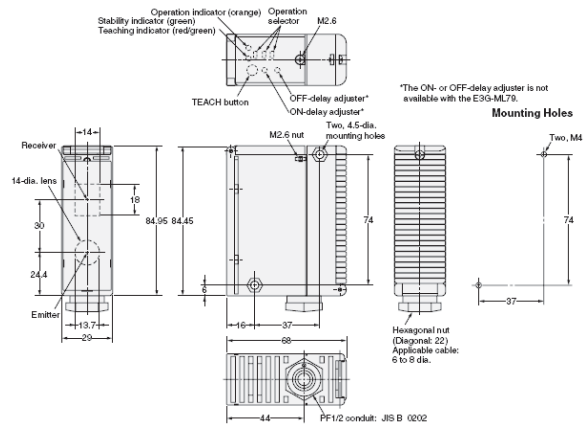
Product discontinuation

E3B2 Series

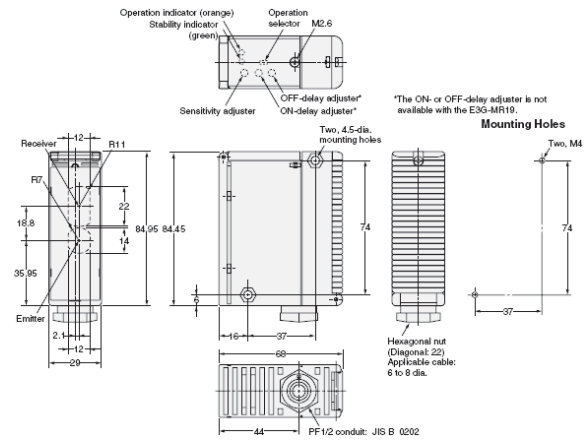


Recommendable replacement

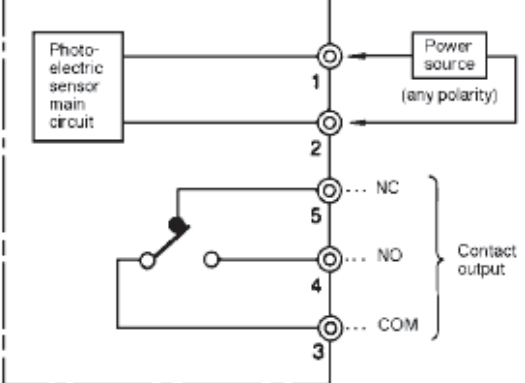
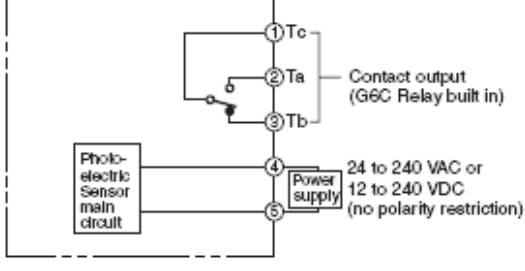
E3G-ML79-US



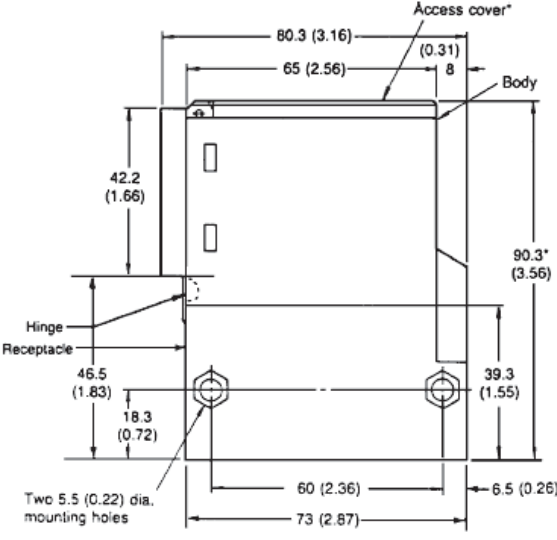

E3G-MR19-US



Wire Connection

Product discontinuation	Recommendable replacement
<p>E3B2 Series</p> 	<p>E3G-ML79/ MR19-US</p> 

Mounting dimensions

Product discontinuation	Recommendable replacement
<p>E3B2 Series</p>  <p>*Allow for a total height of 150 mm (5.91 inches) to open access cover.</p>	<p>E3G-ML79/ MR19-US</p> 

Characteristics

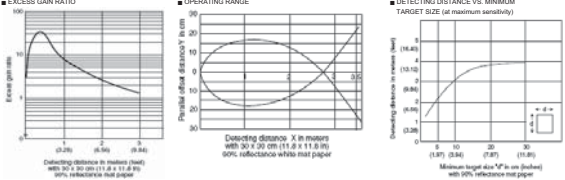
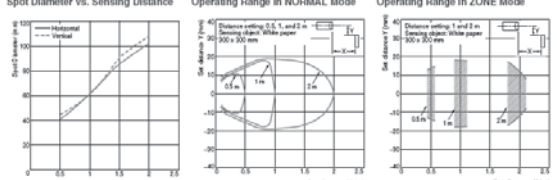
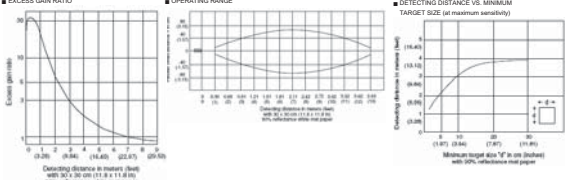
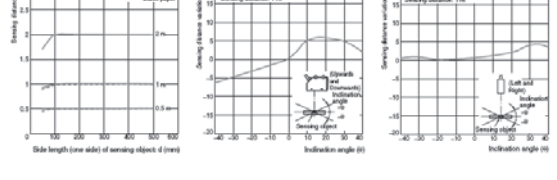
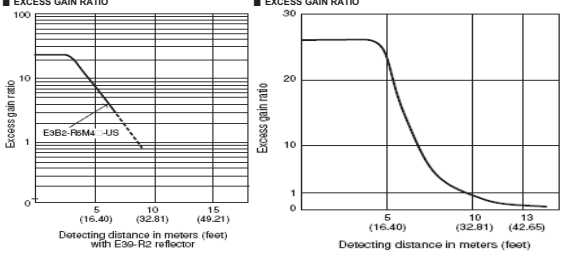
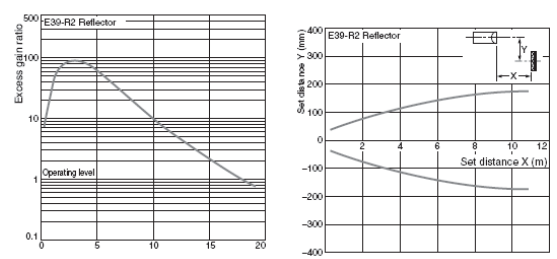
Item	Product discontinuation		Recommended replacement	
	E3B2-D2M4*-US*	E3B2-D2M4**-US-N*	E3G-ML79*/E3G-ML79T*	
Sensing distance	2m(6.56 ft) with 30X30cm (11.8X11.8 in) 90% reflectance white mat paper	3m(9.84 ft) with 30X30cm (11.8X11.8 in) 90% reflectance white mat paper	White paper (300X300mm): 0.2 to 2 m	
Power supply voltage	24 to 240 VDC, 50/60 Hz; 12 to 240 VDC		12 to 240 VDC±10%, ripple (p-p): 10% max. 24 to 240 VAC±10% at 50/ 60 Hz	
Light source(wavelength)	Pulse modulated infrared LED		Infrared LED (860 nm)	
Power/Current Consumption	AC operation	2 VA max.	2 W max.	
	DC operation	1.5 W max.		
Control output	Relay	Type	Relay output: SPDT, 3 A (cosφ= 1) max. at 250 VAC or 3 A max. at 30 VDC L.ON/D.ON selectable	
		Max. load		3 A, 250 VAC, (p.f.= 1)
		Min. load		10 mA, 5 VDC
Response time	On	Without timer	30 ms max. (E3B2-□□M4-US-□)	
		With timer	0.5 to 20 seconds, adjustable (E3B2-□□M4D-US) 0.05 to 0.5 sec (E3B2-□□M4D-US-□-3)	
	Off	Without timer	30 ms max. (E3B2-□□M4-US-□)	
		With timer	0.5 to 20 seconds, adjustable (E3B2-□□M4D-US) 0.05 to 0.5 sec (E3B2-□□M4D-US-□-3)	
Timer function	Type	Independent ON-delay and OFF-delay (E3B2-□□M4D-US)	ON- or OFF- delay: 0 to 5 s (adjustable)	
	Range	0.5 to 20 seconds	(Only for E3G-ML79T*)	
Degree of protection	UL	1	IEC 60529 IP67 (with protective cover)	
	NEMA	1, 3, 4, 12, 13		
	IEC 144	IP66		

*1: Values in parentheses indicate the minimum required distance between the Sensor and Reflector.

Characteristics

Item		Product discontinuation		Recommended replacement
		E3B2-R5M4-*-US-*	E3B2-R7M4-*-US-*	E3G-MR19*/ E3G-MR19T*
Sensing distance		5 m (16.40 ft) with E39-R2 reflector (included)	7 m (22.97 ft) with E39-R2 reflector (included)	10 m (500 mm) (when using E39-R2)
Power supply voltage		24 to 240 VDC, 50/60 Hz; 12 to 240 VDC		12 to 240 VDC±10%, ripple (p-p): 10% max. 24 to 240 VAC±10% at 50/ 60 Hz
Light source(wavelength)		Pulse modulated infrared LED, polarized	Pulse modulated infrared LED	Red LED (650 nm)
Power/ Current Consumption		AC operation	2 VA max.	
		DC operation	1.5 W max.	
Control output	rela y	Type	SPDT (Form 1C)	
		Max. load	3 A, 250 VAC, (p.f.=1)	
		Min. load	10 mA, 5 VDC	
Response time	On	Without timer	30 ms max. (E3B2-□□M4-US-□)	
		With timer	0.5 to 20 seconds, adjustable (E3B2-□□M4D-US) 0.05 to 0.5 sec (E3B2-□□M4D-US-□-3)	
	Off	Without timer	30 ms max. (E3B2-□□M4-US-□)	
		With timer	0.5 to 20 seconds, adjustable (E3B2-□□M4D-US) 0.05 to 0.5 sec (E3B2-□□M4D-US-□-3)	
Timer function		Type	Independent ON-delay and OFF-delay (E3B2-□□M4D-US)	
		Range	0.5 to 20 seconds	
Degree of protection		UL	1	
		NEMA	1, 3, 4, 12, 13	
		EC 144	IP66	
				ON- or OFF- delay: 0 to 5 s (adjustable) (Only for E3G-MR19T*)
				IEC 60529 IP67 (with protective cover)

Operation ratings

Product discontinuation	Recommendable replacement	
<p>E3B2-D2M4-[-]US-[-]</p>  <p>■ EXCESS GAIN RATIO Detecting distance in meters (feet) with 30° x 30° (11.8° x 11.8°) 90% reflectance white mat paper</p> <p>■ OPERATING RANGE Detecting distance X in meters with 30° x 30° (11.8° x 11.8°) 90% reflectance white mat paper</p> <p>■ DETECTING DISTANCE VS. MINIMUM TARGET SIZE (at maximum sensitivity) Minimum target size "T" in mm (inches) with 90% reflectance mat paper</p>	<p>E3G-ML79</p> <p>Spot Diameter vs. Sensing Distance Operating Range in NORMAL Mode Operating Range in ZONE Mode</p>  <p>Spot Diameter vs. Sensing Distance Operating Range in NORMAL Mode Operating Range in ZONE Mode</p>	
<p>E3B2-D2M4-[-]US-N-[-]</p>  <p>■ EXCESS GAIN RATIO Detecting distance in meters (feet) with 30° x 30° (11.8° x 11.8°) 90% reflectance white mat paper</p> <p>■ OPERATING RANGE Detecting distance X in meters with 30° x 30° (11.8° x 11.8°) 90% reflectance white mat paper</p> <p>■ DETECTING DISTANCE VS. MINIMUM TARGET SIZE (at maximum sensitivity) Minimum target size "T" in mm (inches) with 90% reflectance mat paper</p>	<p>Sensing Object Size vs. Setting Distance Sensing Object Angle Characteristics (Vertical) Sensing Object Angle (Horizontal) (Vertical)</p>  <p>Sensing Object Size vs. Setting Distance Sensing Object Angle Characteristics (Vertical) Sensing Object Angle (Horizontal) (Vertical)</p>	
<p>E3B2-R5M4-[-]US-[-] E3B2-R7M4-[-]US</p>  <p>■ EXCESS GAIN RATIO Detecting distance in meters (feet) with E30-R2 reflector</p> <p>■ EXCESS GAIN RATIO Detecting distance in meters (feet)</p>	<p>E3G-MR19</p> <p>Excess Gain vs. Set Distance Parallel Operating Range</p>  <p>Excess Gain vs. Set Distance Parallel Operating Range</p>	

Operation methods

Product discontinuation	Recommendable replacement	
	E3G-ML79	E3G-MR19
Sensitivity: Adjustable	Teaching (in Normal or Zone mode)	Sensitivity adjustment: One-turn adjuster